

## GENERALIZED DEVELOPMENT PLAN SITE NARRATIVE

### 1.0 INTRODUCTION

The Generalized Development Plan (GDP) Narrative has been developed per the requirements of Spotsylvania County's Special Use Permit Application. The GDP Narrative provides a description of Columbia Gas of Virginia's proposed Eastern Pipeline Inspection Gauge (PIG) Insertion Facility located at 13919 Hunting Run Drive. In addition, the Narrative also demonstrates the projects consistency with the County Comprehensive Plan and compliance with County Ordinance.

### 1.1 THE PROJECT

The Eastern Columbia Gas of Virginia (CGV) PIG Insertion Facility will consist of an access road, above and below ground gas pipelines, and general work area within the overall Lot Area of 5.81 acres. Maintenance of CGV's gas distribution main(s) within the surrounding easements and properties shall be conducted from the Eastern PIG site and involves the insertion of a Pipeline Inspection Gauge (PIG) into a aboveground pipeline access port within the work area. Once inserted, the PIG travels through the gas main(s), cleaning, inspecting, and providing data for maintenance purposes. Ultimately, the PIG facility allows Columbia Gas of Virginia enhanced maintenance during regular inspections and accordingly provides a safer working environment. CGV will use best management practices and coordinate with all relevant agencies to minimize and mitigate impacts to the environment and local community.

### 2.0 PROJECT DESCRIPTION

Located within the Generalized Development Plan (GDP) / Special Use Permit (SUP) area of 0.65 acres, the project will involve the disturbance of all 0.65 acres with minimal clearing. As the first stage of construction, brush & minor clearing of the existing CGV easement will precede the clearing of the new 0.59 exclusive CGV easement. Once all erosion and sediment control measures have been installed and are functioning, a 15' gravel access road, drainage culvert, and gravel work area will be installed over prepared sub-grade. Continuing, underground gas mains shall then be installed along with the aboveground gas piping and equipment supporting the PIG launching facility. Finally, fencing and landscaping shall be installed as the final stage of construction. As part of the 1<sup>st</sup> phase of construction, a sediment trap will be installed to minimize the conveyance of sediment downstream / slope of the project. Moreover, once the site has been fully stabilized with vegetation, the sediment trap will be converted to an onsite storm water best management practices which will attenuate the storm runoff from the site and back to predevelopment conditions.

### 2.1 PROJECT LOCATION

The project is located within an existing easement on Lot 82, Section 2, of the Mineral Springs Plantation subdivision in Spotsylvania County and directly adjacent 13919 Hunting Run Drive. Contained within the project area is a 0.59 exclusive easement currently consisting of forested area. Post construction

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approximately 0.50 acres will be impacted, cleared, and re-vegetated. The site slope generally from northeast to southwest with approximately 2–6% percent slopes throughout. In addition, downslope from the project area are existing wetland areas and one (1) outfall ditch for the subject project area.

Refer to the Generalized Development Plan for a depiction of the site and PIG location.

## 2.2 SITE ACCESS & SECURITY

Primary access to the project site shall be from Hunting Run Drive with secondary access being from the existing CGV easement(s). Site access will be improved through the installation of a 15' gravel access road as shown on the GDP plan.

Columbia Gas of Virginia monitors gas main easements 24 hours a day, seven days a week through gas control and monitoring centers. Monitoring, paired with regular site inspections, ensures risks are caught, managed, and rectified as early as possible. Any potential incident will be detected and reported immediately to local, state, and federal authorities as warranted.

## 2.3 TRAFFIC

Traffic expectations for the PIG project site are approximately 1 vehicle very two (2) months. No impacts to AM & PM traffic volumes are anticipated for this project.

## 2.4 FENCING

As part of the final improvements to the site, security fencing with a height of 6.0 feet shall be installed around the aboveground gas piping and PIG maintenance area generally all contained within the gravel work area. In addition, an access gate for vehicular traffic shall be installed with a security locking system with signage of private property and ownership.

## 2.5 STORM WATER BEST MANAGEMENT PRACTICE

Adhering to all local, state, and federal regulations, one (1) storm water attenuation basin will be constructed with this project and will receive all storm water runoff from the graveled areas of the project. Once conveyed to the basin area, storm water will be discharged in a controlled manner through a concrete weir with de-watering orifice encased in gravel. Storm runoff is then discharged at pre-development rates to the existing ditch / swale in form of overland sheet flow. Aiding in nutrient reduction, one (1) Nellie Holly Stevens will be planted within the basin.

## 2.6 DRAINAGE IMPROVEMENTS

In addition to the storm water best management practice, one (1) storm culvert will be installed directly adjacent the Hunting Run Road & the 15' access road. The proposed culvert has been sized for the 10-year storm without overtopping the access road and/or interfering with the downstream culvert. All environmental impacts have been permitted through local, state, and federal agencies.

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## 2.7 CULTURAL & HISTORICAL RESOURCES

No cultural or historical resource impacts are anticipated with this project. However, due east from the SUP area, approximately 500 feet, is a 30' historical battle trench easement. All construction will maintain a minimum of a 500' separation distance from the easement.

## 2.8 ENDANGERED SPECIES SURVEY

In September of 2015, a small whorled pogonia (*Isotria medeoloides*) site survey of the entire Columbia Gas of Virginia easement, including the eastern PIG facility, was conducted by a Townes Site Engineering, P.C. Senior Environmental Scientist. Through this survey, no endangered species (including the small whorled pogonia) was found present on the project location and/or CGV gas easement. Subsequently, the U.S. Army Corps of Engineers issued a Nation Wide Permit 12 for the eastern PIG facility on October 23<sup>rd</sup>, 2017 (Corps Project No. NAO-2017-01804). Through the issuance of the Corps Permit, the U.S. Fish & Wildlife Services provide and confirmed the survey conducted was in accordance with Section 7 of the Federal Endangered Species Act.

## 2.9 ENVIRONMENTAL IMPACTS

Adverse impacts to the environmental will be minimized through the implementation of an Erosion and Sediment Control Plan and Stormwater Pollution Prevention Control Plan as required and regulated by the Spotsylvania County and the Virginia Department of Environmental Quality (VADEQ). All anticipated wetland impacts are permitted through the VADEQ and Army Corps of Engineers (ACOE). As part of CGV project management, a dedicated environmental inspector will be present throughout the project monitoring construction activities and documenting all incidents and modifications / corrections.

## 3.0 PLANNING AND ZONING

Addressing the comprehensive plan and County standards of review as outlined under Section 23-4.5.7, the PIG facility adheres to the SUP general requirements as the Project facility will encompass a relatively small area, 0.59 acres, within a single lot of this subdivision. Located within the Rural District (RU) and directly adjacent existing residential housing, the Project will provide a unique function for CGV while existing as a stand-alone facility with minimal to no interaction with the existing residences. Moreover, due to the spare contact time CGV employees will maintain at the PIG facility, the Project will not hinder nor discourage development of the surrounding residential area(s) as the facility will be virtually undetectable through the use of landscape screening and existing vegetation.

Addressing health and safety of the adjacent RU residents, the PIG facility does not pose any risk to the residents as the PIG facility serves the same function as empty aboveground piping. Moreover, with the PIG facility installed the facility will aid in protecting the public welfare through regular maintenance of the existing CGV gas mains currently being utilized by the general public.

## 4.0 CONSTRUCTION

Project construction will consist of three (3) major phases: (1) site preparation; (2) gas main installation; (2) testing and operation. Columbia Gas of Virginia (CGV) anticipates close collaboration with Spotsylvania County during all three major phases to identify and manage environmental conditions and

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hazards while adhering to all County required permitting and design criteria specific to the project.

#### 4.1 CONSTRUCTION STAGES

The following is a general synopsis of the construction stages for the project.

##### **General Construction Phases**

###### Site Preparation - A

1. Environmental Flagging
2. Limits of Disturbance Flagging
3. Erosion and Sediment Control Installation
4. Culvert & Construction Entrance Installation
5. Timbering & Clearing
6. Silt Trap Installation
7. Grading Operations
8. Road Improvement Installation

###### Gas Main Installation

9. Underground Pipe Installation
10. Aboveground Pipe & PIG Installation

###### Site Preparation - B

11. Fencing and Landscape Installation
12. Storm Management Conversion of Silt Trap
13. Permanent Seeding and Mulching of Site

###### Testing and Operation

14. Connection to Existing Gas Mains
15. PIG Testing
16. Start-Up and Commissioning

#### 4.2 CIVIL WORK

Construction of the Project will begin with initial timbering, clearing, and grading of the SUP area. Access to the Project area will be provided through the installation of a 24" culvert which will be installed in accordance with current Virginia Department of Transportation regulations, standards, and specifications. The Eastern PIG work area will be utilized as the general staging area for construction materials, equipment, parking, truck unloading and loading, and temporary trailers (if required), and area of for assembly. All areas of clearing, grading, pipe mains, and storm management improvements will be surveyed prior to the start of excavation / construction. Prior to construction, all wetlands and limits of clearing shall be clearly flagged in the field. Best Management Practices, including erosion control features, will be installation as the first phase of construction with ditches and the storm management area converted as the final phase of construction.

#### 4.3 TIMBERING & CLEARING

General clearing of the existing Columbia Gas of Virginia easement will be conducted utilizing an brush hog and/or other machinery. Tree, heavy brush, and stump removal will be conducted using typical timbering equipment. No burning of cleared material will be conducted on site. All cleared material will be hauled offsite.

#### 4.4 CONSTRUCTION WORK FORCE

Construction is anticipated to begin July 2018 and be completed by September 2018. The onsite workforce will consist of labors, various skilled trades, surveyors, supervisory personnel, support personnel, and construction management personnel. Construction will generally occur during daylight hours, Monday through Saturday with NO nighttime work. No project lighting is anticipated for this project. Construction noise will be limited to typical trench excavation equipment, trucks, and work personnel. Noise abatement will be implemented directly residential homes where possible. Construction will be conducted in accordance with Spotsylvania County regulations regarding hours of operation for construction activities adjacent to residential housing.

#### 4.5 SECURITY

Construction site security shall be monitored through dedicated project supervisors, managers, and security personnel throughout construction. All personnel, CGV employees and subcontractors, are required to attend and document site presence throughout construction. Daily visitation logs and/or equivalent will be maintained onsite. During off-hours, construction trailers (if necessary) will be locked and all construction equipment will be contained within a temporary secure fenced area.

#### 4.6 EMERGENCY AND SAFETY PROCEDURES /MONITORING

Columbia Gas of Virginia (CGV) safety and emergency response plans shall be adhered to and will be available to all personnel throughout construction. All CGV employees and its subcontractors will be required to be certified safety protocol prior to entering the worksite. Safety education / protocol is conducted offsite by CGV and its representatives meeting all local, state, and federal regulation for gas main installations. All work-related incidence will be logged, reported, and documented with all local, state, and federal authorities. Columbia Gas of Virginia maintains a dedicated 'Safety Manager / Monitor' whom frequents all CGV project sites daily, documenting, reporting, and monitoring safety concerns throughout construction. In addition, as part of the CGV Safety Standards, every workday begins and ends with a safety meeting, attended by all CGV employees and subcontractors, where each day's safety concerns are strategized and discussed. Included among the safety monitoring, a fire safety plan will be implemented throughout construction to minimize fire hazards during welding operations.

#### 4.7 SANITATION SERVICE

No wastewater facility exist at the Project site and no such facility will be constructed for the Project. Temporary portable restrooms facilities will be provided onsite and maintained by a subcontractor during construction.

#### 4.8 WATER SUPPLY

No water supply is required for the Project site. Temporary portable water trucks may be utilized for dust [ASK US HOW.](#)



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control and/or construction purposes by a subcontractor during construction.

#### 4.9 SITE STABILIZATION

The Project site will be seeded temporally throughout construction activities. At the conclusion of all construction, permanent seeding, matting, and other Virginia Department of Environmental Quality measures shall be employed in order to stabilize and establish vegetation throughout the site. Corrective measures will be implemented on a case by case basis as established and monitored by a CGV dedicated environmental inspector.

#### 5.0 OPERATION

Upon commissioning, Columbia Gas of Virginia will inspect the PIG facility approximately every two months and/or per operational conditions dictates with actual PIG operation once per year. Site amenities will be inspected and investigated during each site visit with all deficiencies documented and reported. Regular maintenance, when required, would also be conducted during the typical site visit.

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